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# DEVELOPMENT OF A SIMULATOR OF THE DISTANCE LEARNING COURSE

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*In the article are discussed the creation of an algorithm and a simulator that are able to assist a student or students on the subject "algebra and geometry" on the topic "a plane in space".*

*Keywords:* SIMULATOR, ALGEBRA, GEOMETRY, PROGRAM, PLANE, SPACE, JAVA, FXML.

The main objective of the project work is to try and increase student's access to information and assist them in mastering particular topics using an application that can potentially be downloaded from the internet.

The user is presented with a series of questions, in their language of choice, in which they can only advance to the next question if they have chosen a correct answer. In the case that the user has selected a wrong answer, a prompt message appears on the screen providing assistance to the user in the form of a hint. The program ends when all the questions are completed.

The simulator was created first by writing the algorithm and then drew a series of flowcharts. After that Java FXML was used to code and create the final simulator.

The simulator can be further developed and improved by adding other topics and also maybe by connecting the program to a database in order to allow easy updates of content.

## *Reference*

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